WHAT IS CLAIMED IS:

1.   An image processing apparatus comprising:

event detecting means for detecting an event in accordance with a user's operation;

boundary detecting means comprising separating means for separating a pixel value of a target image into a plurality of components and outputting component images, edge detecting means for detecting an edge of one component image outputted by said separating means and outputting an edge image, binarizing means for binarizing the edge image outputted by said edge detecting means and outputting the binarized image, and thin-line means for making the binarized image outputted by said binarizing means a thin-line image and outputting the thin-line image;

extracting means for extracting a pixel corresponding to an object including a target pixel from the thin-line image, when the event detecting means detects the event at the position designated by the user's operation in a space direction of the target image, by setting, as the target pixel, a pixel of the thin-line image corresponding to the one component image at the position designated by the event, by storing a pixel value of the target pixel at the stored position corresponding to the position on the target pixel, by searching for a portion up to a thin-line area of the

thin-line image in the space direction at the set target
pixel as the origin, and by storing the pixel value searched
at the stored position corresponding to the searched pixel
position;

a plurality of primary storing means for storing the
pixel value corresponding to the object which is transferred
by said extracting means;

display means for displaying a plurality of screens
corresponding to the plurality of primary storing means
based on the pixel values of the pixels corresponding to the
object stored in said extracting means; and

object storing means for, when the event detecting
means detects the event for selecting at least of a part of
the object displayed on said display means by the user's
operation, transferring the pixel value of the pixel stored
in said primary storing means corresponding to the selected
part and storing the pixel value at the stored position
corresponding to the position of the pixel.

2. An apparatus according to Claim 1, further
comprising:

control means for, when the event detecting means
detects the event for designating the rank of the plurality
of screens displayed on said display means in accordance
with the user's operation, transferring said one component

corresponding to a first-ranked screen and a plurality of thresholds which are determined in advance for binarizing the pixel value of the pixel stored in said primary storing means, corresponding to the first-ranked screen,

wherein in said boundary detecting means, said edge detecting means detects the edge of one component image corresponding to one component, which is transferred by said control means, and outputs the edge image,

said binarizing means outputs a plurality of binarized images based on the plurality of thresholds transferred by said control means, and

said thin-line means makes the binarized images outputted by said binarizing means make a thin-line image and outputs the thin-line image, and

said extracting means extracts the pixel corresponding to the object including a target pixel from the thin-line image, by setting, as the target pixel, the pixel corresponding to the position designated by the event, by storing the pixel value of the target pixel at the stored position corresponding to the position of the target image, by searching for a portion up to a thin line area of the thin-line image in the space direction at the set target pixel as the origin, and by storing the pixel value of the pixel searched at the stored position corresponding to the position of the searched pixel.

3. An apparatus according to Claim 2, wherein in said control means,

when detecting the event for designating the rank corresponding the plurality of screens displayed on said display means in accordance with the user's operation, the event detecting means transfers, to said boundary detecting means, said one component which is selected in advance out of the plurality of components and a plurality of new thresholds having a first threshold as a first-ranked threshold, a second threshold as the average of the first-ranked threshold and the second-ranked threshold, and a third threshold as the second-ranked threshold, which are determined based on an n-th threshold corresponding to the thin-line image of the (n-th)-ranked screen, and

in said boundary detecting means, said edge detecting means detects the edge of one component image corresponding to said one component which is transferred by said control means and outputs the edge image,

said binarizing means outputs a plurality of binarized images based on the plurality of new thresholds which are transferred by said control means, and

said thin-line means allows said binarized images outputted by said binarizing means to have thin lines and outputs the thin-line image.

4.   An apparatus according to Claim 1, further
comprising:

designated position storing means for storing the
position designated by the event;

history image storing means for storing an identifier
associated with the threshold and the component
corresponding to the pixel value of the pixel stored in said
object storing means, in accordance with the operation for
selecting a part of the object displayed on the plurality of
screens by the user's operation;

table means for storing the identifier, the components,
and the threshold with a corresponding relationship thereof;
and

control means for, when detecting the event for
selecting at least one part of the object displayed on one
screen out of the plurality of screens displayed on said
display means, controlling the operation for transferring
and storing the pixel value of the pixel stored in said
primary storing means corresponding to the selected part at
the stored position corresponding to the position of the
pixel in said object storing means, and also controlling
such an operation that said designated position storing
means stores therein the position corresponding to at least
one part of the object selected, said table means stores the

components and the thresholds corresponding to at least one

part of the selected object to have a corresponding

relationship with the identifier, and said history image

storing means stores therein the identifier, as the pixel

value, at the position of the pixel in at least one part of

the selected object.

5.   An apparatus according to Claim 4, further

comprising:

motion detecting means for, when the event detecting

means detects the event for designating the position of the

target image in the space direction by the user's operation,

detecting coordinates corresponding to the image at the

designated position on the target image by detecting the

motion at the designated position on the target image,

between the target image and a before-image which is located

temporally before the target image, and

wherein said control means detects the identifier of

said history image storing means at the corresponding

coordinates, detects the thresholds and the components, in

said table means, corresponding to the detected identifier,

and transfers the thresholds and the components to said

boundary detecting means,

in said boundary detecting means, said edge detecting

means detects the edge of the component image corresponding

to the component transferred by said control means, and outputs the edge image,

said binarizing means outputs the binarized image based on a plurality of thresholds which are generated based on the thresholds transferred by said control means, and

said thin-line means makes the binarized image outputted by said binarizing means a thin line image and outputs the thin-line image, and

said extracting means extracts the pixel corresponding to the object including the target pixel from the thin-line image, by setting the pixel at the position designated by the event as the target pixel, by storing the pixel value of the target pixel at the stored position corresponding to the target pixel, by searching for a portion up to a thin-line area of the thin-line image in the space direction at the set target pixel as the origin, and by storing the pixel value of the searched pixel at the stored position corresponding to the searched pixel position.

6. An apparatus according to Claim 4, further comprising:

motion detecting means for detecting target coordinates in the target image corresponding to the coordinates by detecting the motion based on the position of coordinates stored in said designated position storing means

corresponding to a before-image which is located temporally before the target image, between the before-image and the target image,

wherein said control means detects the identifier of said history image storing means corresponding to the coordinates, also detects the components and the thresholds in said table means corresponding to the detected identifier, and transfers the components and the thresholds to said boundary detecting means,

in said boundary detecting means, said edge detecting means detects the edge of the component image corresponding to the components transferred by said control means, and outputs the edge image,

said binarizing means outputs the binarized image based on the thresholds transferred by said control means, and

said thin-line means makes the binarized image outputted by said binarizing means a thin-line image and outputs the thin-line image, and

said detecting means sets the pixel corresponding to the target coordinates to be the target pixel, stores the pixel value of the target pixel at the stored position corresponding to the position of the target pixel, searches for a portion up to a thin-line area of the thin-line image at the set target pixel as the origin, and stores the pixel value of the searched pixel in the space direction at the

stored position corresponding to the position of the searched pixel, thereby extracting the pixel corresponding to the object including the target pixel from the thin-line image.

7.   An apparatus according to Claim 6, wherein said binarizing means in said boundary detecting means outputs the binarized image based on a plurality of thresholds generated from the thresholds transferred by said control means.

8.   An apparatus according to Claim 4, wherein when the history information of a before-image which is located temporally before the target image is not stored in said history image storing means, said control means outputs said predetermined components and thresholds to the boundary detecting means.

9.   An apparatus according to Claim 8, wherein when the history information of the before-image is not stored in said history image storing means,

said control means determines whether or not the average of the pixel values, of a V-plane as a brightness component separated by said separating means in a target pixel corresponding to the position in the target image

designated by the user's operation and the peripheral pixels of the target pixel, is less than 50,

if the average of the pixel values of the V-plane is less than 50, said binarizing means in said boundary detecting means output a binarized image which is obtained by binarizing the V-plane by the predetermined three thresholds, and

if the average of the pixel values of the V-plane is not less than 50, said separating means separates the image into an H-plane as a hue component, an S-plane as a saturation component, and the V-plane as the brightness component, said binarizing means binarizes the three planes by using the same predetermined thresholds and outputs the binarized image.

10. An apparatus according to Claim 1, further comprising:

accumulating means for storing the pixel values of the pixels corresponding to the object extracted from the target image stored in said object storing means when detecting the event for determination in accordance with the user's operation,

wherein said extracting means sets, to be a template, the pixel values of a plurality of pixels corresponding to the object stored in said accumulating means, which is

extracted from a before-image which is temporally before the target image, performs template matching of the target image, and extracts the pixel corresponding to the object from the target image based on the position having the highest matching level.

11. An apparatus according to Claim 4, wherein said control means detects a barycenter from a set of pixels having identifiers corresponding to a before-image which is temporally before the target image, as the pixel values, which are stored in said history image storing means, every identifier,

said apparatus further comprises:

motion detecting means for detecting target coordinates in the target image corresponding to the barycenter by detecting motion based on the barycenter, between the target image and the before-image,

wherein control means detects the identifier of said history image storing means corresponding to the barycenter, also detects the thresholds and the components in said table means, corresponding to the detected identifier, and transfers the thresholds and the components to said boundary detecting means,

in said boundary detecting means, said edge detecting means detects the edge of the component image, corresponding

to the component, transferred by said control means, and outputs the edge image,

said binarizing means outputs the binarized image based on the thresholds transferred by said control means, and

said thin-line means makes the binarized image outputted by said binarizing means a thin-line image and outputs the thin-line image, and

said extracting means extracts the pixel corresponding to the object including the target pixel from the thin-line image, by setting the pixel at the target coordinates as the target pixel, by storing the pixel value of the target pixel at the stored position corresponding to the target pixel, by searching for a portion up to a thin-line area of the thin-line image in the space direction at the set target pixel as the origin, and by storing the pixel value of the searched pixel at the stored position corresponding to the searched pixel position.

12. An apparatus according to Claim 6, wherein in said control means, the event detecting means detects the event for selecting at least one part of the object displayed on said display means by the user's operation, and determines whether or not the pixel value of the pixel stored in said primary storing means corresponding to the selected part is transferred and stored at the stored position corresponding

to the position of the pixel in said object storing means,

said motion detecting means detects motion between the target image and the before-image corresponding to the pixel transferred and stored in said object storing means, based on the determination, and detects the coordinates of the image corresponding to the pixel,

said control means detects the identifier of said history image storing means corresponding to the corresponding coordinates, compensates for motion of the detected identifier in accordance with the motion detected by said motion detecting means, and stores the compensated data as a history image corresponding to the target image of said history image storing means, and

allows said motion detecting means to compensate for the motion of the coordinates included in an identifier area in said history image storing means corresponding to said corresponding coordinates, out of the coordinates corresponding to said image stored in said designated position storing means and said designated position storing means to store therein the compensated coordinates as designated position coordinates corresponding to the target image.

13. An image processing apparatus comprising:
processing method determining means for determining a

processing method for extracting an object from a target image;

object extracting means for extracting the object from the target image based on the processing method determined by said processing method determining means;

primary storing means for storing a pixel value of a pixel corresponding to the object transferred by said object extracting means;

display means for displaying a plurality of screens corresponding to each of a plurality of primary storing means based on the pixel values of the pixels corresponding to the object stored in said plurality of primary storing means;

object storing means for, when a user selects at least a part of the object displayed on said display means, transferring the pixel value of the pixel stored in said primary storing means corresponding to the selected part and storing the pixel value at the stored position corresponding to the position of the pixel;

designated position storing means for storing the position of the target image designated by the user in a space direction;

history image storing means for storing an identifier associated with a threshold and a component corresponding to the pixel values of the pixel stored in said object storing

means, in accordance with the operation for selecting a part

of the object displayed on the plurality of screens by the

user;

table means for storing the identifier, the component,

and the threshold with a corresponding relationship thereof;

and

control means for, when the user selects at least one

part of the object displayed on one screen out of the

plurality of screens displayed on said display means,

controlling an operation for transferring and storing the

pixel value of the pixel stored in said primary storing

means corresponding to the selected part, at the stored

position corresponding to the position of the pixel in said

object storing means, and also controlling such an operation

that said designated position storing means stores the

position corresponding to at least a part of the object

selected, said table means stores the component and the

threshold corresponding to at least a part of the object

selected to have a corresponding relationship with the

identifier, and said history image storing means stores the

identifier, as the pixel value, at the position of the pixel

in at least one part of the object selected,

wherein said processing method determining means

determines the processing method for extracting the object

in accordance with the threshold and the component, which

are detected from said table means, based on the identifier which is stored in said history image storing means corresponding to the designated position of the target image designated by the user.

14. An apparatus according to Claim 13, further comprising:

motion detecting means for, when the user designates the position of the target image in the space direction, detecting corresponding coordinates of a before-image, which is temporally before the target image, at the designated position of the target image by detecting motion at the designated position of the target image between the target image and the before-image,

wherein said control means detects the identifier of said history image storing means corresponding to said corresponding coordinates, detects the threshold and the component in said table means corresponding to the identifier detected, and transfers the threshold and the component to said object extracting means,

said object extracting means detects an edge of a component image corresponding to the component and outputs an edge image,

outputs a binarized image of the edge image based on a plurality of thresholds generated from the thresholds,

makes the binarized image a thin-line image and outputs
the thin-line image, and

extracts the pixel corresponding to the object
including a target pixel from the thin-line image, by
setting, as the target pixel, the pixel corresponding to the
position designated by the user, by storing the pixel value
of the target pixel at the stored position corresponding to
the position of the target pixel, by searching for a portion
up to a thin line area of the thin-line image in the space
direction at the set target pixel as the origin, and by
storing the pixel value of the searched pixel at the stored
position corresponding to the position of the searched pixel.

15. An apparatus according to Claim 13, further
comprising:

motion detecting means for detecting target coordinates
in the target image corresponding to the coordinates by
detecting motion based on the position of the coordinates
stored in said designated position storing means
corresponding to a before-image which is temporally before
the target image, between the target image and the before-
image,

wherein control means detects the identifier of said
history image storing means corresponding to the coordinates,
also detects the threshold and the component in said table

means corresponding to the detected identifier, and transfers the threshold and the component to said object extracting means,

said object extracting means detects an edge of a component image corresponding to the component, and outputs an edge image,

outputs a binarized image based on the threshold, and

makes the binarized image a thin-line image and outputs the thin-line image, and

extracts the pixel corresponding to the object including the target pixel from the thin-line image, by setting the pixel at the target coordinates as the target pixel, by storing the pixel value of the target pixel at the stored position corresponding to the target pixel, by searching for a portion up to a thin-line area of the thin-line image in the space direction at the set target pixel as the origin, and by storing the pixel value of the searched pixel at the stored position corresponding to the searched pixel position.

16. An apparatus according to Claim 15, wherein said object extracting means outputs the binarized image based on a plurality of thresholds generated from the thresholds transferred by said control means.

17. An apparatus according to Claim 13, wherein when history information corresponding to the image before the target image is not stored in said history image storing means, said control means outputs the predetermined threshold and component to said object extracting means.

18. An apparatus according to Claim 17, wherein when the history information corresponding to the image before the target image is not stored in said history image storing means,

said control means determines whether or not the average of the pixel values, of a V-plane as a brightness component of the target pixel corresponding to the position in the target image designated by the user and the peripheral pixels of the target pixel, is less than 50,

if the average of the pixel values of the V-plane is less than 50, said control means controls such an operation that said object extracting means outputs the binarized image which is obtained by binarizing the V-plane by three predetermined thresholds,

if the average of the pixel values of the V-plane is not less than 50, said control means controls such an operation that said object extracting means separates the pixels in the target image into an H-plane as a hue component, an S-plane as a saturation component, and the V-

plane as the brightness component, the three H-, S-, and V-
planes are binarized by using the same predetermined
thresholds and the binarized image is outputted.

19.   An apparatus according to Claim 13, further
comprising:

accumulating means for storing the pixel value of the
pixel corresponding to the object extracted from the target
image stored in said object storing means, when the user
determines the operation,

wherein said object extracting means sets, to be a
template, the pixel values of a plurality of pixels
corresponding to the object stored in said accumulating
means, which is extracted from the image before the target
image, performs template matching of the target image, and
extracts the pixel corresponding to the object from the
target image based on the position having the highest
matching level.

20.   An apparatus according to Claim 13, wherein said
control means detects a barycenter from a set of pixels
having pixel values of identifiers of a before-image which
is temporally before the target image, stored in said
history image storing means, every identifier,

said apparatus further comprises:

motion detecting means for detecting target coordinates in the target image corresponding to the barycenter by detecting motion based on the barycenter, between the target image and the before-image,

said control means detects the identifier of said history image storing means corresponding to the barycenter, also detects the threshold and the component in said table means corresponding to the detected identifier, and transfers the threshold and the component to said object extracting means,

said object extracting means detects an edge of a component image corresponding to the component, and outputs an edge image,

outputs a binarized image based on the threshold, and

makes the binarized image a thin-line image, and outputs the thin-line image, and

extracts the pixel corresponding to the object including the target pixel from the thin-line image, by setting the pixel at the target coordinates as the target pixel, by storing the pixel value of the target pixel at the stored position corresponding to the target pixel position, by searching for a portion up to a thin-line area of the thin-line image in the space direction at the set target pixel as the origin, and by storing the pixel value of the searched pixel at the stored position corresponding to the

searched pixel position.

21. An apparatus according to Claim 15, wherein when
the user selects at least one part of the object displayed
on said display means, said control means determines whether
or not the pixel value of the pixel stored in said primary
storing means corresponding to the selected part is
transferred and stored at the stored position corresponding
to the position of the pixel of said object storing means,

said motion detecting means detects motion between the
target image and the image before the target image
corresponding to the pixel transferred and stored in said
object storing means, based on the determination, and also
detects the coordinates of the image corresponding to the
pixel,

said control means detects the identifier of said
history image storing means corresponding to the
corresponding coordinates, compensates for motion of the
detected identifier in accordance with the motion detected
by said motion detecting means, and stores the compensated
data as the history image corresponding to the target image
of said history image storing means, and

controls such an operation that said motion detecting
means compensates for the motion of the coordinates included
in an identifier area in said history image storing means

corresponding to the corresponding coordinates, out of the
coordinates corresponding to the image stored in said
designated position storing means and said designated
position storing means stores therein the compensated data
as the designated position coordinates corresponding to the
target image.

22. An image processing apparatus comprising:

object extracting means for extracting an object from a
target image through a plurality processing and outputting
the result of extracting the object;

selecting means for selecting at least a part of the
result of extracting the object through the plurality of
processing in accordance with a user's operation; and

object storing means for storing the result of
extracting the object, which is selected by said selecting
means.

23. An apparatus according to Claim 22, wherein said
selecting means selects one object out of the result of
extracting the object through the plurality of processing in
accordance with the user's operation.

24. An apparatus according to Claim 23, wherein said
selecting means selects a part of one object of the result

of extracting the object through the plurality of processing
in accordance with the user's operation.

25. An apparatus according to Claim 22, further
comprising:

determining means for determining a plurality of
processing methods by using said object extracting means,

wherein said object extracting means extracts the
object from the target image through a plurality of
processing determined by said determining means.

26. An apparatus according to Claim 25, wherein said
determining means determines a plurality of processing
methods for extracting the object from the target image
based on a designated position of the target image, which is
designated by the user.

27. An apparatus according to Claim 26, wherein when
the user designates a position of the target image, under
the control of said determining means, said object
extracting means separates pixels in the target image into a
plurality of components, generates edge images of component
images, outputs areas, as the object, which are separated by
edges of the edge images including a target pixel
corresponding to the designated position which is designated

by the user.

28. An apparatus according to Claim 25, wherein when
the user designates a rank of the results of extracting the
object through the plurality of processing, said determining
means determines the plurality of processing methods based
on the rank.

29. An apparatus according to Claim 28, wherein said
object extracting means separates pixels in the target image
into a plurality of components, generates edge images
corresponding to component images of the components,
binarizes the edge images by using a predetermined threshold,
and outputs the binarized images, and

when the user designates rank for the binarized images,
under the control of said determining means, said object
extracting means binarizes the component image corresponding
to the first-ranked binarized image by using the
predetermined threshold and outputs a plurality of binarized
images.

30. An apparatus according to Claim 29, wherein when
the user designates the rank for the plurality of binarized
images by using the predetermined threshold,

under the control of said determining means,

said object extracting means binarizes the component image by using a first threshold of the first-ranked binarized image, a second threshold as the average of the thresholds of the first-ranked binarized image and a second-ranked binarized image, and a third threshold as the second-ranked threshold, and outputs a plurality of binarized images.

31. An apparatus according to Claim 25, further comprising:

processing history storing means for storing a processing history as a processing method corresponding to the result of extracting the object, when the result of extracting the object selected by said selecting means is stored in said object storing means,

wherein said determining means determines a plurality of processing methods for extracting the object from the target image based on the processing history of a before-image stored in said processing history storing means, which is processed before the target image.

32. An apparatus according to Claim 31, wherein said object extracting means separates the pixels in the target image into a plurality of components,

generates edge images in component images of components,

binarizes the edge images by using a predetermined
threshold and outputs the binarized image, and

outputs the result of extracting the object every
binarized image,

said processing history storing means comprises:

designated position storing means for storing the
designated position of the target image designated by the
user;

history image storing means for storing, as a pixel
value, an identifier associated with the threshold and the
component corresponding to at least a part of the object
selected by said selecting means; and

table means for storing therein the identifier, the
component, and the threshold with a corresponding
relationship thereof,

said apparatus further comprises motion detecting means
for detecting corresponding coordinates of the before-image
at the designated position by motion detection at the
designated position to the target image, between the target
image and the before-image, and,

said object extracting means detects the identifier of
said history image storing means corresponding to the
corresponding coordinates, and also detects the threshold
and the component in said table means, corresponding to the
identifier detected, generates the edge image in the

component image of the component, outputs the edge image, as the binarized image, based on a plurality of thresholds generated from the threshold, and outputs the result of extracting the object every binarized image.

33. An apparatus according to Claim 31, wherein when extracting the object from the target image based on the processing history of the before-image which is processed before the target image, said processing history storing means succeeds the processing history of the before-image to the object extracted from the target image.

34. An apparatus according to Claim 22, further comprising:

display means for displaying the objects extracted from the target image by using said object extracting means through a plurality of processing on a plurality of screens.

35. An apparatus according to Claim 34, wherein said selecting means comprises a pointing device capable of designating a predetermined position of the object in the plurality of screens displayed on said display means.

36. An image processing apparatus comprising:

determining means for determining a processing method

for extracting an object from a target image in accordance with at least of a user's operation;

processing history storing means for storing a processing history as a history of the processing method determined by said determining means; and

object extracting means for extracting the object from a target image based on the processing method determined by said determining means,

wherein said determining means determines the processing method for extracting the object from the target image based on the processing history stored in said processing history storing means.

37. An apparatus according to Claim 36, wherein said processing history storing means stores the processing history extracted by said object extracting means every object.

38. An apparatus according to Claim 36, wherein said determining means determines the processing method for extracting the object from the target image based on the designated position in the target image designated by the user.

39. An apparatus according to Claim 38, wherein said

processing history storing means comprises designated position storing means for storing the position in the target image, which is designated by the user.

40. An apparatus according to Claim 39, wherein said determining means determines a plurality of processing methods for extracting the object from the target image based on the designated position, of a before-image stored in said designated position storing means, which is processed before the target image.

41. An apparatus according to Claim 40, wherein when extracting the object from the target image based on the processing history of the before-image, said processing history storing means succeeds the processing history of the before-image to the object extracted from the target image.

42. An apparatus according to Claim 40, wherein said object extracting means separates pixels in the target image into a plurality of components, generates edge images corresponding to component images of the components, binarizes the edge images by using a predetermined threshold, and outputs the binarized image, and outputs the object every binarized image, and

said processing history storing means comprises:

the designated position storing means;

history image storing means for storing, as a pixel value, an identifier associated with the component and the threshold corresponding to the object extracted by said object extracting means; and

table means for storing the identifier, the component, and the threshold with a corresponding relationship thereof.

43. An apparatus according to Claim 42, wherein said apparatus further comprises motion detecting means for detecting target coordinates of the before-image corresponding to the designated position by detecting motion at the designated position of the target image, between the target image and the before-image,

under the control of said determining means, said object extracting means detects the identifier of said history image storing means at the corresponding coordinates, and also detects the threshold and the component in said table means, corresponding to the identifier detected,

generates the edge image in the component image of the component,

outputs the edge image, as the binarized image, based on a plurality of thresholds generated from the threshold, and

outputs the result of extracting the object every

binarized image.

44. An apparatus according to Claim 42, wherein said apparatus further comprises motion detecting means for detecting target coordinates in the target image corresponding to the coordinates by motion detecting based on the coordinate position of the before-image, which is stored in said designated position storing means, between the target image and the before-image,

under the control of said determining means, said extracting means detects the identifier of said history image storing means at the coordinates, and also detects the component and the threshold in said table means, corresponding to the detected identifier,

detects an edge of a component image corresponding to the component, and generates an edge image,

outputs the edge image, as a binarized image, based on the threshold, and

extracts the object from the binarized image.

45. An apparatus according to Claim 44, wherein said binarizing means outputs the binarized image based on a plurality of thresholds generated from the thresholds.

46. An apparatus according to Claim 38, further

comprising:

object storing means for storing the pixel value of the pixel corresponding to the object extracted by said object extracting means; and

control means for, when storing, in said object storing means, the pixel value of the pixel corresponding to the object at the position of the target image designated by the user, controlling such an operation that said designated position storing means stores the designated position, said history image storing means stores, as the pixel value, the identifier associated with the component and the threshold when extracting the object at the designated position, and said table means stores the identifier, the component, and the threshold with a corresponding relationship thereof.

47. An image processing method comprising the steps of:

extracting an object from a target image through a plurality of processing and outputting the result of extracting the object;

selecting at least a part of the result of extracting the object which is obtained through the plurality of processing, in accordance with a user's operation; and

storing the selected result of extracting the object.

48. An image processing method comprising the steps of:

determining at least a processing method for extracting an object from a target image in accordance with a user's operation;

storing a processing history as a history of the determined processing method;

extracting the object from the target image based on the determined processing method; and

determining the processing method for extracting the object from the target image based on the stored processing history.

49. A storage medium for storing an image processing program, wherein said program comprises the steps of:

extracting an object from a target image through a plurality of processing and outputting the result of extracting the object;

selecting at least a part of the result of extracting the object which is obtained through the plurality of processing, in accordance with a user's operation; and

storing the selected result of extracting the object.

50. A storage medium for storing an image processing program, wherein said program comprises the steps of:

determining at least a processing method for extracting an object from a target image in accordance with a user's operation;

storing a processing history as a history of the determined processing method;

extracting the object from the target image based on the determined processing method; and

determining the processing method for extracting the object from the target image based on the stored processing history.